

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A direct drive motor in a washing machine comprising:
a ~~stator 14~~stator having a winding portion with coils wound thereon;
a ~~rotor 13~~rotor fixedly connected to a washing ~~shaft 4~~shaft for direct drive of a drum, the ~~rotor 13~~rotor having a ~~sidewall 13b~~sidewall, and a rear ~~wall 13a~~wall with a pass through ~~hole 131~~hole at a center; and
a ~~connector 16~~connector of a material having a vibration mode different from the washing shaft, insert molded at the center of the rear ~~wall 13a~~wall of the rotor to form one body with the rotor, and fixedly connected to the washing shaft to connect the rotor to the washing shaft, and support the washing ~~shaft~~shaft,
wherein the rotor has a bonding piece for enhancing bonding forces between the connector and the rotor at the time of insert molding of the connector.
2. (Currently Amended) The direct drive motor as claimed in claim 1, wherein the ~~rotor 13~~rotor is constructed of steel plate by pressing to form the side ~~wall 13b~~wall and the rear ~~wall 13a~~wall as one body.
3. (Currently Amended) The direct drive motor as claimed in claim 2, wherein the pass through ~~hole 131~~hole at a center of the rear ~~wall 13a~~wall of the ~~rotor 13~~rotor is formed at a center of a ~~hub 132~~hub which is a portion projected in a stator side or in a direction opposite thereto with respect to neighboring surface.
4. (Currently Amended) The direct drive motor as claimed in claim 3, wherein the washing ~~shaft 4~~shaft is formed of metal, and the ~~connector 16~~connector is formed of resin which insulates between the washing ~~shaft 4~~shaft and the ~~rotor 4~~rotor.
5. (Currently Amended) The direct drive motor as claimed in claim 4, wherein the ~~connector 16~~connector includes a ~~serration 164~~serration on an inside circumferential surface

having a shape in conformity with a shape of a ~~serration 400~~ serration at a rear end portion of the washing ~~shaft 4~~ shaft.

6. (Currently Amended) The direct drive motor as claimed in claim 5, wherein the ~~connector 16~~ connector further includes reinforcing ~~ribs 161~~ ribs for reinforcing a strength of the ~~connector 16~~ connector.

7. (Currently Amended) The direct drive motor as claimed in claim 4, wherein the ~~rotor 13~~ rotor includes at least one communication hole in a neighborhood of the pass through ~~hole 131~~ hole for enhancing bonding force between the ~~connector 16~~ connector of resin and the rotor. ~~rotor at the time of insert molding of the connector.~~

8. (Currently Amended) The direct drive motor as claimed in claim 7, wherein the ~~connector 16~~ connector is insert molded in the rotor such that the ~~connector 16~~ connector covers an inside of the pass through ~~hole 131~~ hole and front and rear surfaces of neighborhood of the pass through ~~hole 131~~ hole of the rotor.

9. (Currently Amended) The direct drive motor as claimed in claim 7, wherein the pass through ~~hole 131~~ hole in the rotor ~~13~~ has a bonding piece 210 ~~rotor~~ has the bonding piece projected in a length direction of the washing ~~shaft 4~~ shaft for enhancing the bonding forces ~~force~~ between the ~~connector 16~~ connector of resin and the rotor ~~13~~ rotor ~~at the time of insert molding of the connector.~~

10. (Currently Amended) The direct drive motor as claimed in claim 4, wherein the rear ~~wall 13b~~ wall has at least one ~~bonding piece 211~~ the bonding piece around the pass through ~~hole 131~~ hole in the rotor ~~13~~ rotor, the bonding piece projected in a length direction of the washing ~~shaft 4~~ shaft for enhancing the bonding forces ~~force~~ between the ~~connector 16~~ connector of resin and the rotor ~~13~~ rotor ~~at the time of insert molding of the connector.~~

11. (Currently Amended) A direct drive motor in a washing machine comprising:

a ~~stator 14~~ stator having a winding portion with coils wound thereon;

a ~~rotor 13~~ rotor fixedly connected to a washing ~~shaft 4~~ shaft for direct drive of a drum, the ~~rotor 13~~ rotor having a ~~sidewall 13b~~ sidewall, and a rear ~~wall 13a~~ wall formed as one body by pressing steel plate, with communication holes in the rear wall and a pass through hole 131 hole at a center of the rear ~~wall 13a~~ wall; and

a ~~connector 16~~ connector of resin insert molded such that the ~~connector 16~~ connector is bonded on inner, and outer sides of the rear ~~wall 13a~~ wall of the rotor including the communication holes 137 holes therein to form one body with the rotor, and fixedly connected to the washing shaft to connect the rotor to the washing shaft, and support the washing ~~shaft~~ shaft,

wherein the rotor has a bonding piece for enhancing bonding forces between the connector and the rotor at the time of insert molding of the connector.

12. (Currently Amended) The direct drive motor as claimed in claim 11, wherein the washing ~~shaft 4~~ shaft is formed of metal, and the ~~connector 16~~ connector is formed of resin which insulates between the washing ~~shaft 4~~ shaft and the rotor ~~4shaft and the rotor~~.

13. (Currently Amended) The direct drive motor as claimed in claim 12, wherein the ~~connector 16~~ connector includes a ~~serration 164~~ serration on an inside circumferential surface having a shape in conformity with a shape of a ~~serration 400~~ serration at a rear end portion of the washing ~~shaft 4~~ shaft.

14. (Currently Amended) The direct drive motor as claimed in ~~claim 6~~, claim 13, wherein the ~~connector 16~~ connector further includes reinforcing ~~ribs 161~~ ribs for reinforcing a strength of the ~~connector 16~~ connector.

15. (Currently Amended) The direct drive motor as claimed in claim 11, wherein the ~~rotor 13~~ rotor includes at least one communication hole in a neighborhood of the pass through ~~hole 131~~ hole for enhancing bonding force between the ~~connector 16~~ connector of resin and the rotor. ~~rotor at the time of insert molding of the connector.~~

16. (Currently Amended) The direct drive motor as claimed in claim 11, wherein the pass through ~~hole 131~~hole in the ~~rotor 13~~rotor has a ~~bonding piece 210~~the bonding piece projected in a length direction of the washing ~~shaft 4~~shaft for enhancing ~~the bonding force~~forces between the ~~connector 16~~connector of resin and the ~~rotor 13~~rotor, ~~at the time of insert molding of the connector.~~

17. (Currently Amended) The direct drive motor as claimed in claim 11, wherein the rear ~~wall 13b~~wall has at least one ~~bonding piece 211~~the bonding piece around the pass through ~~hole 131~~hole in the ~~rotor 13~~rotor, ~~the bonding piece~~ projected in a length direction of the washing ~~shaft 4~~shaft for enhancing ~~the bonding force~~forces between the ~~connector 16~~connector of resin and the ~~rotor 13~~rotor, ~~at the time of insert molding of the connector.~~

18. (Currently Amended) A direct drive motor in a washing machine comprising:

a ~~stator 14~~stator having a winding portion with coils wound thereon;

a ~~rotor 13~~rotor of magnetic metal fixedly connected to a washing ~~shaft 4~~shaft of metal for direct drive of a drum, the ~~rotor 13~~rotor having a ~~sidewall 13b~~sidewall, and a rear ~~wall 13a~~wall with a pass through ~~hole 131~~hole at a center; and

a ~~connector 16~~connector of resin for insulating between the washing shaft and the rotor, insert molded at the center of the rear ~~wall 13a~~wall of the ~~rotor 16~~rotor to form one body with the rotor, and ~~connect~~connecting the washing shaft to the ~~rotor~~rotor,

wherein the rotor has a bonding piece for enhancing bonding forces between the connector and the rotor at the time of insert molding of the connector.

19. (Currently Amended) The direct drive motor as claimed in claim 18, wherein the ~~rotor 13~~rotor includes at least one communication hole in a neighborhood of the pass through ~~hole 131~~hole for enhancing ~~the bonding force~~forces between the ~~connector 16~~connector of resin and the ~~rotor~~rotor, ~~at the time of insert molding of the connector.~~

20. (Currently Amended) The direct drive motor as claimed in claim 19, wherein the ~~connector 16~~ connector is insert molded in the rotor such that the ~~connector 16~~ connector covers an inside of the pass through ~~hole 131~~ hole and front and rear surfaces of neighborhood of the pass through ~~hole 131~~ hole of the rotor.